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Editor, W. J. HUMPHREYS

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### IMPORTANT NOTICE

Owing to the necessity of drastically reducing the printing cost of the Review to keep within the funds for the fiscal year, now drawing to a close, all "contributions" are omitted in this issue. However, it is hoped that "contributions" may be resumed later.—Editor.

**BIBLIOGRAPHY** 

C. FITZHUGH TALMAN, in charge of library

#### RECENT ADDITIONS

The following have been selected from among the titles of books recently received as representing those most likely to be useful to Weather Bureau officials in their meteorological work and studies:

American society of heating and ventilating engineers.

Guide. 1932 ... vol. 10. New York. [c1932.] xiv, 876
p. illus. 23 cm. [Contains articles on air-conditioning.]

Baur, Franz.
Sonnenflecken und Witterung. p. 68-73. illus. 24 cm.
(Sonderdr.: Natur und Museum, H. 3, 1932. Frankfurt a. M.)

Blair, W. R., & Lewis, H. M.

Radio tracking of meteorological balloons. p. 1531-1560. illus. 23 cm. (Proc. Inst. radio engin., v. 19, No. 9, Sept., 1931.)

Dines, William Henry

Collected scientific papers of ... Pub. by the Royal mete-orological society. [London] 1931. x, 461 p. figs. plates (fold.) port. 26 cm.

Fortescue, C. L.

Lightning and its effects on transmission lines. East Pittsburgh. n. d. [3], 91, [2] p. plates. 29 cm. [Manifolded.]

Greenburg, Leonard, & Bloomfield, J. J.
Impinger dust sampling apparatus as used by the United
States public health service. [Washington. 1932.] p.
654-675. figs. plate. 23½ cm. (U. S. Pub. health
service, Pub. health rep., v. 47, no. 12, Mar. 18, 1932.)

Holborn, L., & others.

Wärmetabellen. Ergebnisse aus den thermischen Untersuchungen der Physikalisch-Technischen Reichsanstalt.

Braunschweig. 1919. 72 p. 23½ cm.

McLennan, J. C., & others.

Height of the polar aurora in Canada. p. 285-296. figs.

plates. 26 cm. (Canadian journ. of research, v. 5, Sept., 1931.)

Metropolitan life insurance company.

Air conditions and the comfort of workers. New York. n.
d. 20 p. illus. 19½ cm. (Industrial health series, no. 5.)

Mosby, Hakon.

Synshine and radiation . . . Bergen. 1932. 110 p. figs. pl. 31 cm. (Norwegian north polar exped. with the "Maud" 1918–1925, sei. results. v. 1, no. 7.)

Nelson, A. L.

Shelterbelts and fruit. Laramie. 1931. 23 p. illus. 23 cm. (Univ. Wyoming. Agr. exp. sta. Bull. no. 179, May, 1931.)

Shaw, [William] Napier.

Manual of meteorology. vol. 4. Meteorological calculus: pressure and wind. (A revised edition of part 4, 1919.)... With the assistance of Elaine Austin. Cambridge. 1931. xx, 359, xii p. figs. 27 cm. Sherlock, R. H., & Stout, M. B.

Characteristics of wind gusts. p. 20-24, figs. 29½ cm. (N. E. L. A. bulletin, Jan., 1932.)

U. S. Bureau of standards.

Protection of electrical circuits and equipment against lightning. Preliminary report of the sectional committee on protection against lightning. September 12, 1929. ington. 1929. ix, 107 p. figs. plate. 20 cm. pub. Bur. stand., no. 95.)

## SOLAR OBSERVATIONS

#### SOLAR RADIATION MEASUREMENTS DURING APRIL, 1932

By HERBERT H. KIMBALL, in charge, Solar Radiation Investigations

For a description of instruments employed and their exposures, the reader is referred to the January, 1932, REVIEW, page 26.

Table 1 shows that solar radiation intensities averaged above the normal intensity for April at Washington and

Madison, and close to normal at Lincoln.

Table 2 shows an excess in the total solar radiation received on a horizontal surface at all stations except Twin Falls and Lincoln, which show a slight deficit, and Miami, which is very close to the normal.

Table 3 summarizes solar radiation measurements, I<sub>v</sub> and I<sub>r</sub> obtained by means of the yellow and red glass filters described in the February, 1932, Review, and values of the coefficient of atmospheric turbidity derived therefrom. The turbidity has increased with the season, as was to be expected.

Skylight polarization measurements, obtained at Madison on six days give a mean of 60 per cent and a maximum of 65 per cent on the 8th. At Washington, measurements obtained on nine days give a mean of 58 per cent and a maximum of 63 per cent on the 1st. These are

average values for April for both stations.